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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,638

10/04/2006

Laurent Dufour

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4286

23338 7590 11/26/2008
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EXAMINER

AURORA, REENA

ART UNIT

PAPER NUMBER

2862

MAIL DATE

DELIVERY MODE

11/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,638	DUFOUR, LAURENT	
	Examiner	Art Unit	
	Reena Aurora	2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/10/08</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities:

Lines 1 – 2, the phrase “the phase difference” lacks antecedent basis.

Line 2, the phrase “the relative passing” lacks antecedent basis.

Line 6, the phrase “the position” lacks antecedent basis.

Line 10, the phrase “the direction” lacks antecedent basis.

Line 13, the phrase “the form” lacks antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Campbell (5,545,985).

As to claims 1 – 7, Campbell discloses a magnetoresistive position sensor comprising at least two detection cells (29, 30), and secondly the position of at least two switching edges (42, 43) of a logic electric signal (fig. 10 (a) – 10 (f)) delivered by the detection system, the two magnetic transitions (N, S) being separated from each other by a given width in the direction of relative movement between the generator element

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(22) and the detection system, characterized in that it consists of: choosing the form of a reference logic electric signal (fig. 10 (a) – 10 (f)) by determining the position of at least one first and one second variation edge, spacing the detection cells (29,30;42,43) in the direction of movement by a given value so that one cell (29,30) detects at least the first magnetic transition to obtain a logic signal with at least one switching edge corresponding to the position determined for the first variation edge, whilst the other cell (42,43) detects at least the second magnetic transition to obtain a logic signal with at least one switching edge corresponding to the position determined for the second variation edge, and of combining the logic signals delivered by the detection cells so as to obtain a logic electric signal corresponding to the reference electric signal (Note Fig. 10 (f) and col. 8, line 40 – col. 9, line 18)

As to claims 8 – 12, Campbell discloses a magnetoresistive position sensor comprising at least two detection cells (29,30;42, 43) and delivering a logic signal (fig. 10 (a) – 10 (f)) comprising at least two switching edges and corresponding to changes in the magnetic field generated by the element, the detection cells being linked to means for processing electric signals delivered by the detection cells, characterized in that the detection cells (29,30;42,43) are spaced apart in the direction of relative movement between the generator element (22) and the detection system by a given value so that one cell (29,30) detects at least the first magnetic transition to obtain a logic signal with at least one switching edge corresponding to the position determined for the first variation edge, whilst the other cell (42, 43) detects at least the second magnetic transition to obtain a logic signal with at least one switching edge

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corresponding to the position determined for the second variation edge, and in that the processing means combine the electric signals of the detection cells so as to obtain a logic electric signal corresponding to a reference electric signal (Note Fig. 10 (f) and col. 8, line 40 – col. 9, line 18)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Reena Aurora
/Reena Aurora/
Primary Examiner, Art Unit 2862